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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/777,446

02/12/2004

Barend Den Ouden

A78.12-0001

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27367

7590

09/16/2009

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MINNEAPOLIS, MN 55402

EXAMINER

BORISSOV, IGOR N

ART UNIT

PAPER NUMBER

3628

MAIL DATE

DELIVERY MODE

09/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/777,446

Applicant(s)

OUDEN, BAREND DEN

Examiner

Igor N. Borissov

Art Unit

3628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 18-25 and 28-32 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-8, 18-25 and 28-32 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Remarks

Office Action of 01/07/2009 has been withdrawn.

Response to Amendment

Amendment received on 10/03/2008 is acknowledged and entered. Claims 4, 8, 21, 25 have been withdrawn. Claims 9-17, 26 and 27 have been canceled. Claims 1-3, 5-7, 18-20, 22-24 and 28 have been amended. New claims 29-32 have been added. Claims 1-8, 18-25 and 28-32 are currently pending in the application.

Declaration under 37 CFR 1.131 has been acknowledged and entered. Upon careful review of the Declaration under 37 CFR § 1.131 including Exhibit A, the examiner has determined that the Exhibit A does not overcome the applied rejections for the following reasons:

(a) Under 37 CFR 1.131(b), the exhibits must either demonstrate reduction to practice of the claimed invention or conception followed by diligence.

Reduction to practice has never been achieved. Specifically, Exhibit A explicitly states (page 6):

4. Further development and implementation

The model has high potential value for the electricity market in Europe. But the model has to be developed and proven yet. There are still many uncertainties and unclarities to be resolved.

and:

It is proposed to ask for a subsidy for this project at suitable governmental and international level. The total cost of the project is roughly estimated at 500.000 Euro: 100.000 for phase 1 (excluding the preliminary test system), 150.000 for the preliminary test system, and 250.000 for the testing and evaluation in phase 2.

As stated in Exhibit A, the model has not been developed yet.

Conception is also not achieved since the exhibit does not outline a method of estimating an effect on prices of energy due to energy flow in an energy network. Merely listing possible advantages and limitations of implementation of the invention in the document, or providing some diagrams of possible market occurrences does not demonstrate conception of a specific set of steps for the claimed invention. While conception is the mental part of the inventive act, it must be capable of proof, such as by demonstrative evidence or by a complete disclosure to another. Conception is more than a vague idea of how to solve a problem. The requisite means themselves and their interaction must also be comprehended. See *Mergenthaler v. Scudder*, 1897 C.D. 724, 81 O.G. 1417 (D.C. Cir. 1897).

Where conception occurs prior to the date of the reference, but reduction to practice is afterward, it is not enough merely to allege that applicant had been diligent. *Ex parte Hunter*, 1889 C.D. 218, 49 O.G. 7333 (*Comm'r Pat* 1889). Rather, the applicant must show evidence of facts establishing diligence. The Applicant must account for the entire period during which diligence is required. *Gould V. Schawlow*, 363 F.2d 908, 919, 150 USPQ634, 643 (CCPA 1966). A 2-day period lacking activity has been held to be fatal. *In re Mulder*, 716 F.2d 1542, 1545, 219 USPQ 189, 193 (*Fed. Cir.* 1983) (37 CFR 1.131 issue); *Fitzgerald v. Arbib*, 268 F.2d 763, 766, 122 USPQ 530, 532 (CCPA 1959) (Less than 1 month of inactivity during critical period). Efforts to exploit an invention commercially do not constitute diligence in reducing it to practice. An actual reduction to practice in the case of a design for a three-dimensional article requires that it should be embodied in some structure other than a mere drawing.); *Kendall v. Searles*, 173 F.2d 986, 993, 81 USPQ 363, 369 (CCPA 1949) (Diligence requires that applicants must be specific as to dates and facts.).

Accordingly, the effective day of the current application is 09/04/2002.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 29-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 is not in compliance with MPEP 608.01(i), which states that a preamble should be separated from a body of a claim by a term "comprising". Accordingly, the claim is vague and indefinite, it is unclear which part of the claim specifies the known limitations or general description of all elements of the claim, and which part constitutes new elements which Applicant considers as the new or improved portion. Specifically, claim 29 appears to be directed to a server, however the term comprising relates to the elements of the energy network, not the server.

Claims 30-32 are rejected as being dependent from the rejected claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-7, 18-20, 22-24 and 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peljto (US 7,299,212 B2) in view of Redi et al. (US 2002/0071395 A1).

Peljto et al. teaches a method regulating the energy flow in an energy network, said network comprising at least a first area (control area) of interconnected producers and consumers of energy and a second area (control area) of interconnected producers and consumers of energy, in which the energy network comprises at least one network connection that limits the transportation capacity of the energy network between said first area and said second area, the method comprising:

Claims 1, 18 and 29,

receiving data indicative of intended energy production by the producers and the intended energy consumption by the consumers for each of the first and second areas (C. 3, L. 49-56);

determining isolated energy prices in the first area and in the second area based on supply and demand in each respective area (Cl. 1, L. 36-43);

determining available transportation capacity of the energy network between said first area and said second area (C. 4, L. 59-67);

determining an effect on energy prices in said first area and in said second area on the basis of the isolated energy prices and of transmission constraints which are specified using DC network model (C. 4, L. 61-63), and on the basis of the available transportation capacity (transmission line capacity) (C. 5, L. 21-28);

outputting the effect on energy prices in said first area and the second area for use by at least one of the producers, the consumers and an operator of the network connection (C. 5, L. 21-25).

While Peljto et al. teaches that said determining an effect on energy prices in said first area and in said second area is conducted on the basis of transmission constraints which are specified using DC network model (C. 4, L. 61-63), Peljto et al. does not explicitly disclose simulating transportation of energy over the network.

Redi et al. teaches a method for modeling energy-based routing in wireless networks, wherein simulation technique is utilized for determining a path having minimum loss of transmission power [0018]; [0048]; [0071]; [0074].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Peljto et al. to include simulating transportation of energy over the network, as disclosed in Redi et al. because it would advantageously allow to determine the most energy-conserving route, as specifically stated in Redi et al. [0015]. Furthermore, it would advantageously provide simple and realistic picture of real-world network demand behavior, and would allow a good simplification of the calculation mathematics which is accurate enough to provide acceptable results.

Claims 2, 3, 5-7, 19, 20, 22-24 and 28. Same reasoning as applied to claims 1 and 18.

Claim 30. Redi et al. teaches said server wherein the server is configured to simulate energy flow in the network [0048]. The motivation to combine the references would be to determine the most energy-conserving route.

Claim 31. Peljto et al. teaches said server wherein the server is configured to receive equilibrium energy prices in the first area and the second area when a market for the first energy area is isolated from a market for the second energy area (Cl. 1, L. 36-43).

Claim 32. Peljto et al. teaches said server wherein the server is configured to calculate equilibrium energy prices in the first area and the second area when a market for the first energy area is isolated from a market for the second energy area (Cl. 1, L. 36-43).

Response to Arguments

Applicant's arguments with respect to claims 1-3, 5-7, 18-20, 22-24 and 28 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Igor N. Borissov/
Primary Examiner, Art Unit 3628
09/10/2009